
II. *Obſervations upon Inciſions of the Cornea. By Monſieur* Gandolphe, *Doctor of Phyſick at* Dunkirk. April 1709.

Contuſions upon the Bodies of Animals do not always make the greateſt Impreſſion on the Parts that immediately receive them: I had an Inſtance of this, in a blow upon the Eye, this preſent Month of *April*, 1709.

There was a light Contuſion on the outſide of the Part, with very little alteration to appearance; but a Veſſel being broken within, pour'd forth a conſiderable quantity of Blood: The Eye alſo loſt its Tranſparency, and almoſt its Sight; which was ſo very weak, that it could ſcarce perceive the greateſt Light when objected to it. The *Cornea* appear'd all over red, but without any Inflammation or Blood-Veſſels; it receiving its colour from the Blood pour'd in upon the *Aqueous Humour*.

I ſaw the Patient the 6th day after he had received the Hurt: He had been let Blood thrice; and the 8th day I cauſed the *Cornea* to be open'd near the middle; my deſign being to make a large Orifice, I determined not to make it at the bottom of the *Cornea*. The Orifice being made, there came forth ſome drops of the *Aqueous Humour* mixt with Blood. The *Cornea* ſtill appear'd as red as before, and was not ſo even as we could have wiſh'd. This Circumſtance made me reſolve to make a ſecond Orifice immediately, as large as the former, but lower: There run out ſome drops of the *Humour*; and the Eye appear'd not ſo red and convex as before. The

Humour continued coming out of the Orifice for ſome time. We applied nothing to the Eye, but a Compreſs (or Stupe) dipt in a Mixture of four Ounces of Plantain-water, and two Ounces of a Vulnerary Water.

The day after the Operation, the upper part of the *Cornea* was tranſparent, the lower part not ſo red, and the whole Membrane appear'd to have recover'd its natural Convexity. It ſeems that all the extravaſated Blood had quite run out, had the lower part of the *Cornea* been open'd, and remain'd ſo for ſome time.

I obſerved the Alterations of the Eye for three days together; in which time the extravaſated Blood ſeem'd ſome times to ſpread over the whole Cavity of the *Cornea.*

We judged that the motion, that the Patient himſelf, had opened anew ſome Blood-veſſel, or had mixed the extravaſated Blood with the *Aqueous Humour*; for we did not perceive all that time that there was any freſh Effuſion of more Blood.

The 5th day after the two firſt Inciſions I cauſed a third to be made at the bottom of the *Cornea*: there run out ſome drops of the *Humour*, and continued ſo to do for ſome time; and in two days after, the Eye recover'd its natural Tranſparency.

The *Pupil* was now very much dilated; but by little and little it contracted again, but not to its uſual ſmalneſs.

The *Iris* all this while kept its motion; ſo that we cannot ſuſpect that the Lancette, in making the Inciſion on the *Cornea*, any ways touch'd upon the *Iris*, becauſe the *Pupil* continued exactly round: And a ſtroke, that is able to divide the continuity of the Parts of the Eye, and cauſe a ſuffuſion of Blood, is but too capable of depriving the *Iris* of its natural Power of Contracting.

The *Pupil*, which before the Blow was one Line in Diameter when the *Iris* was contracted, is at leaſt two Lines in Diameter at preſent. The tranſparency of the *Humours*, and Convexity of the *Cornea* are the ſame as before.

The Sight is now reſtored; and there remains no other alteration than what neceſſarily follows from the like Dilatation of the *Pupil*.

From hence we may draw ſome Remarks, that will be of uſe in Practice, and ſhew that Inciſions may be ſucceſsfully made on the *Cornea*.

1. Inciſions are made on this Part without any Pain.

2. The Orifices unite again without any Scar; which has been before obſerved, but is known to very few.

3. We find that Plants of a diſcuſſive Quality have an ill effect, the Patient finding himſelf much worſe after uſing a Cataplaſme made of Cervile and Parſley: Theſe Plants, which are excellent in reſolving Extravaſated Blood in the Muſcular Parts, have an ill effect when applied the to Eye, by cauſing Pain, and rendring the Sight more diſturbed. We had twice experience of this; and the Patient aſſured us both times, that he found himſelf much better from the uſe of the firſt Medicine.

When there is a conſiderable Effuſion of Blood in the Eye in couching of a Cataract, and no Orifice is made in the *Cornea* to let it out, it may ſo alter the Tranſparency of the *Vitreous Humour*, as to cauſe a loſs of Sight; which ſometimes follows from this Operation.

Additions.

I made the Inciſion higher on the *Cornea*, than it ought to be, becauſe the Perſon that perform'd the Operation, having never before made the like, and deſiring to make an Orifice large enough to diſcharge eaſily the *Aqueous Humour*, I thought it proper to make it near the middle of the *Cornea*, that the Point of the Lancette might not touch upon the *Iris*; which would have been of much worſe conſequence than a Scar. The Effuſion of Blood, that ſometimes happens in Couching of Cataracts, is diſcuſſed again either by external Applications or the Help of Nature; but when the Effuſion is very conſiderable, this Operation may be neceſſary to prevent worſe Conſequences.

As for the Scar, that ſometimes follows from an Inciſion of the *Cornea*, I remember I have read in an ancient Phyſical Author, that we need not fear it: But if we Practice Inciſions on Eyes affected with Inflammations, Ulcers, or Defluxions, which very much dilate the *Retina* and Veſſels, an Eſchar forms itſelf much more eaſily in theſe Caſes, and conſequently we ought to uſe the greater caution; which was not ſo neceſſary in my Patient, who had no kind of Inflammation on the Eye or *Cornea*.